

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

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UNITED STATES PATENT AND TRADEMARK OFFICE

**PAT. & T.M. OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES**

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte BISWA R. BANERJEE, S. CHRISTOPHER GLADWIN, ARIF MASKATIA  
and ALAN SOUCY

Appeal No. 1998-0943  
Application No. 08/300,500

ON BRIEF

Before THOMAS, HAIRSTON, and RUGGIERO, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-13, all of the claims pending in the present application. An amendment after final rejection filed March 5, 1999, was entered by the Examiner. In the Examiner's Answer, the Examiner indicated that claims 2, 3, and 5 were allowable. Accordingly, only the rejection of claims 1, 4, and 6-13 is before us on appeal.

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The disclosed invention relates to a mobile interface device which operates to remotely control application programs running on a host computer. An input subsystem, including a stylus, provides positional data representing spatial positions of the stylus. A further embodiment includes a pen-based graphical interface which communicates with an operating system on the host computer having handwriting recognition capability.

Claim 1 is illustrative of the invention and reads as follows:

1. A mobile user interface device for controlling a host computer, comprising:

a graphical display subsystem, including a graphical display, for displaying an image;

an input subsystem, including a stylus, for receiving from a user positional data representing spatial positions of said stylus; and

a wireless communication subsystem for sending data to and receiving data from said host computer over a wireless communication link; and

means for controlling operations of said graphical display subsystem, said input subsystem and said wireless communication subsystem, said means for controlling (i) causing said wireless communication link to be created; (ii) causing an application program to be run on said host computer; (iii) receiving from said input subsystem said positional data, providing a response to said user in acknowledgment of said positional data, and transmitting over said wireless communication link said positional data to said application program; and (iv) receiving over said wireless communication link from said application program data representing said image, and causing said graphical

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display subsystem to display said image on said graphical display.

The Examiner's Answer cites the following prior art:

More et al. (More)	5,194,852	Mar. 16, 1993
McCain et al. (McCain)	5,309,351	May 03, 1994
Kannan et al. (Kannan)	5,423,045	Jun. 06, 1995

(Filed Apr. 15, 1992)

Mark Weiser (Weiser), "The Computer for the 21st Century,"  
Scientific American, pages 94-104 (September 1991).

Claims 1 and 6-11 stand finally rejected under 35 U.S.C. § 102(e) as being anticipated by McCain.<sup>1</sup> Claims 4, 12, and 13 stand finally rejected under 35 U.S.C. § 103. As evidence of obviousness, the Examiner offers McCain in view of More with respect to claims 4 and 12, and McCain in view of Kannan with respect to claim 13.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs<sup>2</sup> and Answer for the respective details thereof.

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<sup>1</sup> Although the Examiner makes reference to the Weiser publication in the "Response to argument" portion of the Answer, the statement of the grounds of rejection relies on McCain alone.

<sup>2</sup> The Appeal Brief was filed July 21, 1997. In response to the Examiner's Answer dated October 9, 1997 (remailed January 11, 1999), Appellants submitted a Reply Brief on March 5, 1999 which was entered by the Examiner as indicated in the communication dated March 31, 1999.

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OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the Examiner, the arguments in support of the rejections and the evidence of anticipation and obviousness relied upon by the Examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejections and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the disclosure of McCain fully meets the invention as recited in claims 1, 6, 7, 9, and 11. We reach the opposite conclusion, however, with respect to claims 8 and 10. We are also of the view that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention set forth in claims 4, 12, and 13. Accordingly, we affirm-in-part.

We consider first the rejection of claims 1 and 6-11 under 35 U.S.C. § 102(e) as anticipated by McCain. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every

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element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Assoc, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

With respect to independent claim 1, the Examiner's analysis (Answer, pages 4 and 7) suggests how the various limitations are disclosed by McCain. In particular, the Examiner points to a discussion beginning at column 6, line 56 in McCain relating to the interactive operation between the hand-held unit and the host computer.

In response, Appellants' primary argument (Brief, pages 10 and 11) centers on the alleged failure of McCain to disclose that the hand-held unit provides a response to the user in acknowledgment of received positional data from the input subsystem as recited in appealed claim 1. We do not find such argument to be persuasive. Positional information is received by McCain's hand-held unit through operation of a touch screen input feature. As discussed at col. 1, line 66 to col. 2, line 2 of McCain, "[a] Display Touch Scanner is used to scan the surface of

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the display to determine where and when the display has been touched, to provide touch input to the system, and to control the operation sequence for various applications of the invention" (emphasis added). McCain does not provide an explicit disclosure of an acknowledgment to a user in response to the input of positional data. We note, however, that, although McCain may not spell out every detail of the claimed invention, a reference anticipates a claim if it discloses the claimed invention "such that a skilled artisan could take its teachings in combination with his own knowledge of the particular art and be in possession of the invention." In re Graves, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995), quoting from In re LeGrice, 301 F.2d 929, 936, 133 USPQ 365, 372 (CCPA 1962). In our view, the skilled artisan would appreciate that any touch screen input device would require an acknowledgment feature to verify, for example, that actual contact was made with the screen. McCain is not required to specifically disclose such acknowledgment feature in order to be an anticipatory reference because such a user notification feature would be present in any system with a touch screen input feature. As further evidence of the recognition to a skilled artisan of the inclusion of user acknowledgment features in touch screen input devices, we cite the following

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excerpt from Computer Dictionary, Second Edition, published by Microsoft Press (copy enclosed) in which "touch screen" is defined in part as "[a] computer screen designed or modified to recognize the location of a touch on its surface. By touching the screen, the user can make a selection or move a cursor." Even in the limited example provided by this definition, the movement of the cursor would provide an acknowledgment to the user of positional input data provided by the location of the "touch" on the screen. We further point to the example provided at column 8, lines 10-20 in McCain in which the display of operating parameters of a "touched" part of displayed diagram of a process would serve as an acknowledgment to the user of the location (position) of the "touch".

For the reasons discussed above, we sustain the Examiner's rejection of independent claim 1 as being anticipated by the disclosure of McCain.<sup>3</sup>

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<sup>3</sup>The use of a dictionary definition of a standard reference work cited to support a fact judicially noticed is not considered a new ground of rejection. In re Boon, 439 F. 2d 724, 7227, 169 USPQ 231, 234 (CCPA 1971). With respect to the Weiser publication discussed by the Examiner in the "Response to argument" portion of the Answer, we, along with Appellants, are puzzled as to the relevance attributed to this reference by the Examiner. Since we find, however, that McCain discloses all of the limitations of appealed claim 1, any discussion of the merits of Weiser is moot.

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Turning to a consideration of the Examiner's 35 U.S.C. § 102(e) rejection of independent claims 6 and 11 as being anticipated by McCain, we sustain the rejection of these claims as well. The limitations of claims 6 and 11 are directed to the wireless transfer of positional information from the hand-held interface device to the host computer with claim 6 additionally reciting the modification of images on the display of the hand-held device by the host computer. After reviewing the McCain reference, we agree with the Examiner's position (Answer, pages 8 and 9) that all of the limitations of appealed claims 6 and 11 are disclosed by McCain. In our view, McCain's disclosure of the wireless communication of touch screen positional data from the hand-held unit to the host computer and the subsequent control of the presentation of input menu choice screen images on the display of the hand-held unit (e.g. McCain, column 7, lines 11-13) meets all of the requirements of claims 6 and 11.

After reviewing Appellants' arguments with respect to the Examiner's rejection of claims 6 and 11 at page 13 of the Brief, it is our opinion that such arguments are not commensurate with the scope of claim 1. It is axiomatic that, in proceedings before the PTO, claims in an application are to be given their broadest reasonable interpretation consistent with the



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specification, and that claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983). Moreover, limitations are not to be read into the claims from the specification. In re Van Geuns, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) citing In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). Appellants contend that McCain does not disclose the provision of a response to a user's positional input "prior to receiving subsequently image modification generated by the application program running on the host computer." In our view, even assuming, arguendo, that such response sequence language would distinguish over McCain, no such language exists in the claims. In view of the above, since all of the limitations of independent claims 6 and 11 are disclosed by McCain, the Examiner's 35 U.S.C. § 102(e) rejection of claims 6 and 11 is sustained.<sup>4</sup>

Dependent claims 7 and 9 have not been separately argued by Appellants. Accordingly, these claims will be treated as falling

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<sup>4</sup> The recitations "said host computer" at line 6 of claim 11 and "said positional and selection data" at line 3 of claim 13 lack clear antecedent reference.

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with their parent claim 6. See In re Young, 927 F.2d 588, 590, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); In re Nielson, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987); and In re Wood, 582 F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978). Thus, it follows that the examiner's rejection of claims 7 and 9 under 35 U.S.C. § 102(e) is also sustained.

After considering the entirety of the Appellants' comments directed to the McCain reference, however, we find Appellants' arguments to be persuasive with respect to dependent claim 8. We note that the limitations of dependent claim 8 are directed to the queuing of plural positional data points in a pen event buffer in the hand held interface device. Like Appellants, we do not find such a feature disclosed by McCain. While the Examiner suggests (Answer, page 9) the inherent nature of buffers for queuing data points, no support on the record has been provided to support such a conclusion. To establish inherency, evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference and would be recognized as such by persons of ordinary skill. In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) citing Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). "Inherency,

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however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." Id. citing Continental, 948 F.2d at 1269, 20 USPQ2d at 1749.

Accordingly, the Examiner's 35 U.S.C. § 102(e) rejection of dependent claim 8, as well as claim 10 dependent on claim 8, is not sustained.

Turning to the obviousness rejection of claims 4, 12, and 13, we note that in rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825

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(1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

With respect to dependent claims 4 and 12, the Examiner, as the basis for the obviousness rejection, proposes to modify the wireless communication system disclosure of McCain by relying on More to supply the missing teaching of providing handwriting recognition to the host computer "so detailed user input may be detected by the system" (Answer, page 5).

In response, Appellants assert (Brief, page 16) that the Examiner has failed to establish a prima facie case of obviousness since proper motivation for the Examiner's proposed combination has not been set forth. We agree. It is our opinion that the Examiner has combined the general teachings of the handwriting recognition system of More with the touch screen input system of McCain in some vague manner without specifically describing how the teachings would be combined. This does not

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persuade us that one of ordinary skill in the art having the references before her or him, and using her or his own knowledge of the art, would have been put in possession of the claimed subject matter.

Further, we are cognizant of the Examiner's assertion (Answer, page 5) as to the conventionality of using handwriting input and recognition techniques as display user interface features. Notwithstanding the merits of this contention, however, we find no convincing reasoning supplied by the Examiner as to how and why the skilled artisan would apply such handwriting recognition features to the system described in McCain. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F. 2d 1260, 1266 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). We are left to speculate why the skilled artisan would modify the touch screen input subsystem of McCain with the handwriting recognition teachings of More. The only reason we can discern is improper hindsight reconstruction of Appellant's claimed invention. Accordingly, the Examiner's 35 U.S.C. § 103 rejection of dependent claims 4 and 12 is not sustained.

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Further, we find the Examiner's line of reasoning to be similarly deficient with respect to the power conservation features of claim 13 and, therefore, we also do not sustain the obviousness rejection of this claim. In our view, any combined structure resulting from the Examiner's proposed combination of the generalized power conservation features of Kannan and the wireless communication system of McCain would not address the specific limitations of claim 13 which set forth specific "out-of-range" criteria for input positional and selection data.

In summary, we have sustained the Examiner's 35 U.S.C. § 102(e) rejection of claims 1, 6, 7, 9, and 11, but have not sustained the 35 U.S.C. § 102(e) rejection of claims 8 and 10. Further, we have not sustained the Examiner's 35 U.S.C. § 103 rejection of claims 4, 12, and 13. Therefore, the Examiner's decision rejecting claims 1, 4, and 6-13 is affirmed-in-part.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

JAMES D. THOMAS  
Administrative Patent Judge

KENNETH W. HAIRSTON  
Administrative Patent Judge

JOSEPH F. RUGGIERO  
Administrative Patent Judge

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